## **Economic Considerations**

The purpose of economic analysis is to provide information to decision makers. Economic analysis provides information on the benefits and costs of conservation plans that is used in the decision making process.

Economic "effects" can be summarized into six categories: Land, Capital, Labor, Management, Risk and Profitability. Economic "effects" are not always in "dollars"; resources can be valued in "non-monetary" units such as hours, tons, animal units or qualitative terms such as "reduced risk".

<u>Land</u>: Land is the basic unit of production. It is where crops are grown, livestock grazed and wildlife produced. Land is usually measured in acres. Productivity on the land is measured as units of production (pounds, bushels, etc.). Structures are also included with land.

Consider the following questions to describe land effects:

- What is the current land use?
- Does the proposed conservation plan depend on or require the client to change a land use?
- Do aspects of the plan reduce land available for production?
- Does the client have to get approval from a landlord or lender to implement a conservation plan?
- Does the proposed system aid participation in USDA programs?

<u>Capital</u>: Capital represents the landowners "ability to pay" for farm or land improvements. Capital is a measure of the landowner's monetary assets (dollars), physical assets (land and machinery), their ability to borrow money (credit), obtain financial assistance (cost-share), or barter "goods and services".

Consider the following questions to describe capital effects:

- Does the client have available or can acquire the funds needed to implement the proposed conservation plan?
- Does the investment in conservation alter the financial viability of normal farm operations?
- Does the client have the cash flow to finance annual operation and maintenance costs of

- conservation practices during the life of the practices?
- Are there adequate materials and/or equipment present or obtainable to operate and maintain the practices?
- Is cost share adequate and available for key practices?

<u>Labor</u>: Labor represents the landowner's ability to work or hire workers. Labor is measured in units of time (hours, years). Labor includes the landowner, family, hired help or other trained workers.

Consider the following questions to describe labor effects:

- Is there an adequate supply of permanent and part time labor available to implement, operate and maintain the conservation plan?
- Does off-farm employment affect the availability of family labor?

<u>Management</u>: Management is measured in qualitative terms to describe the land user's knowledge, skills and ability to install and operate the conservation practices.

Consider the following questions to describe management effects:

- Does the client understand the inputs needed to implement the system and their responsibility in obtaining these inputs?
- Will the client be able to maintain the system as implemented?
- Is the client willing to learn what they need to know to manage the conservation system?
- Is there adequate management present or obtainable to make decisions on operation of the conservation system?

Risk: Risk is the exposure to monetary loss, injury or damage to resources. Risk is measured in qualitative units. Risk affects crop and livestock/wildlife yields, flexibility, timing, cash flow and other resources. The risk resulting from the conservation plan affects the landowner, those living or working on the land, the local community and people traveling near the planning area.

Consider the following questions to describe risk effects:

- Are there adequate markets available for the operations products?
- Is the client willing to adopt new practices?

- Are SWAPA resources difficult to manage because of inherent characteristics (shallow soil, deep sand, steep slopes, intensive rainfall, wind)?
- Does the plan maintain or increase the client's eligibility for government agricultural programs?

<u>Profitability</u>: Profitability describes the relative benefits and costs and is often measured in dollars. If an activity is profitable, the benefits are greater than the costs and the system can be sustained over a period of time.

Consider the following questions to describe profitability effects:

- How important are profitable operations to the client?
- Do the benefits of improving the current operation outweigh the installation, operation and maintenance costs (positive benefit to cost ratio or positive net returns)?
- Is the system cost effective (there is an acceptable relationship between the costs of the conservation system and the changes it brings about)?
- There is a reasonable expectation of the long-term profitability for the operation if the system is implemented?
- Will normal production processes with conservation in place sustain the financial viability of the operation?

## Documentation

Document economic effects in the conservation assistance notes or in the Effects Notes section of the NRCS-CPA-52.